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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,945	09/12/2000	Franciscus L.A.J. Kamperman	PHN 17,285	2098
Michael E. Bel	7590 05/17/2007	•	EXAM	INER
Philips Intellectual Property & Standards PO Box 3001 Briarcliff Manor, NY 10510			KIM, JUNG W	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
·	09/623,945	KAMPERMAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jung Kim	2132				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
	 Responsive to communication(s) filed on <u>01 March 2007</u>. This action is FINAL. 2b) ☑ This action is non-final. 					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-4 and 14-30 is/are pending in the ap 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 and 14-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct and the order of the oath or declaration is objected to by the Examine	epted or b) objected to by the liderawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

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DETAILED ACTION

1. This Office action is in response to the amendment filed on 3/1/07.

Claims 1-4 and 14-30 are pending.

Response to Amendment

3. The 112/2nd paragraph rejection of claim 1 is withdrawn as the amendment overcomes the 112/2nd paragraph rejection.

Response to Arguments

- 4. Applicant's arguments, with respect to the rejection(s) of claim(s) 1-4, 14-17 and 25-30 under Chang have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Barbir.
- 5. In response to applicant's argument that in Barbir's system, the supplemental data is not recoverable, and hence does not disclose the limitations of claim 3, examiner disagrees. The symbol frequencies used for secure compression and generated by the encoder are a function of the occurrence of a given symbol and the supplemental data. Barbir, col. 8:12-15. Because the supplemental data is utilized to both encode the symbols at a sending node and decode the encoded symbols at a receiving node, by necessity, the supplemental data is recoverable.

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6. Applicant further argues that Barbir does not disclose a method "whereby encoded data includes one of the set of parameters and at least data which can be used to derive the set of parameters" as required by claim 3. Examiner disagrees. The symbol frequencies are computed at the decoder (Barbir, col. 9:60-62), which necessitates at least data that can be used to derive the set of parameters. Hence, independent claim 3 and its corresponding dependent claims remain rejected under Barbir.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-17 are rejected under 35 U.S.C. 101 because it is not limited to tangible embodiments. Claims 18-20 indicate that an arrangement is defined by a method step. As such, claims 14-17 are not limited to statutory subject matter and are therefore non-statutory.

Claim Rejections - 35 USC § 112

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 14-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. Claims 14-17 claim an arrangement for performing a method as defined in claims 1-4 respectively. Claims 18-20 further state that claims 1, 2 and 4 define an arrangement. However, an arrangement per se does not define any structural limitations. It is also not clear how a method defines an arrangement. It is further not clear what statutory class claims 14-17 belong to (machine, method or product). Claims 21-24 recite that claims 14-17 define a playback device; however, claims 14-17 merely claim an arrangement.

Claim Rejections - 35 USC § 102

- 10. Claims 1-4, 14-17 and 25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Barbir USPN 6,122,379. (hereinafter Barbir)
- 11. As per claim 1, Barbir discloses a method of encoding data, comprising the acts of: recoverably embedding supplemental data by inserting the supplemental data into encoded data using at least one parameter which is altered in order to embed the supplemental data; (Col. 8:56-67; 9:21-31) deriving the at least one parameter from the data prior to encoding; (8:63-64; 9:29-31) and encoding the data, the recoverably embedded supplemental data, and the altered at least one parameter, wherein the data is encoded using an algorithm that is determined by the altered at least one parameter. (8:12-22; Huffman/arithmetic encoder)

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12. As per claim 2, Barbir discloses a method of extracting supplemental data of encoded data as defined in claim 1. (Col. 9:37-67)

- 13. As per claim 3, Barbir discloses a method of encoding input data, comprising the acts of: partitioning the data into frames; (fig. 8; col. 10:1-5) determining a set of parameters for each frame; (fig. 8; 10:5-10) reducing the data rate of the input signal by applying the algorithm determined by an affected parameter set whereby encoded data includes one of the set of parameters and at least data which can be used to derive the set of parameters, the data rate-reduced signal, and recoverably embedded supplemental data, wherein the set of parameters is affected by the supplemental data. (fig. 6)
- 14. As per claim 4, Barbir further discloses a method of extracting information which is embedded in the parameter set of an encoded signal as defined in claim 3. (fig. 7)
- 15. As per claims 14 and 15, Barbir discloses an arrangement for performing the method of claims 1 and 2. (figs. 1-3 and 9)
- 16. As per claims 16 and 17, Barbir discloses an arrangement for performing the methods of claims 3 and 4. (figs. 1-3 and 9)

17. As per claim 25, Barbir discloses lossless encoding is used to encode the supplemental data. (Huffman/arithmetic encoding)

- 18. As per claim 26, Barbir discloses the supplemental data is encoded bit by bit. (Col. 8:56-66; 10:1-32)
- 19. As per claim 27, Barbir discloses wherein before the embedding, partitioning of the data into frames and determining a set of parameters for each frame, wherein the set of parameters can be altered to embed the supplemental data. (Col. 10:1-33)
- 20. As per claim 28, Barbir discloses wherein the parameters are altered to a dedicated value in response to the supplemental data to be embedded. (Col. 10:15-19)
- 21. As per claim 29, Barbir discloses the parameters are altered to a dedicated value in response to the supplemental data to be encoded. (Col. 8:56-67; 9:21-31; 10:1-32)
- 22. As per claim 30, Barbir discloses a method of encoding data, comprising the acts of: analyzing data to determine a parameter (Col. 8:63-64; 9:29-31); altering the parameter utilizing supplemental data (8:56-67; 9:21-31); and encoding the data, the supplemental data and the altered parameter to derive the encoded data, wherein the encoded data is encoded by an algorithm determined by the altered parameter, and

wherein the supplemental data is recoverable from the encoded data. (8:12-22; Huffman/arithmetic encoder; 9:8-10)

Claim Rejections - 35 USC § 103

- 23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 24. Claims 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbir in view of Bloom et al. USPN 6,332,194. (hereinafter Bloom)
- 25. As per claims 18 and 20-22, the rejections of claims 1 and 2 under 35 USC 102(e) as being anticipated by Barbir is incorporated herein. Barbir does not disclose the arrangement for performing the method of claims 1 and 2 is a disc player for audio and audio-visual media. However, it is well known in the art to provide supplemental embedding protection schemes in a disc player for audio and audio-visual media. For example, Bloom discloses a method for data preparation and data insertion to manage copy generation of digitized data, wherein the method is implemented in a disc player for audio and audio-visual media. Col. 4:6-28. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the arrangement for performing the method of claims 1 and 2 to be a disc player for audio and audio-visual

media. One would be motivated to do so to manage the reproduction of audio-visual data as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 18 and 20-22.

26. As per claims 19, 23 and 24, the rejections of claims 3 and 4 under 35 USC 102(e) as being anticipated by Barbir is incorporated herein. Barbir does not disclose the arrangement for performing the method of claims 3 and 4 is a disc player for audio and audio-visual media. However, it is well known in the art to provide supplemental data embedding protection schemes in a disc player for audio and audio-visual media. For example, Bloom discloses a method for data preparation and data insertion to manage copy generation of digitized data, wherein the method is implemented in a disc player for audio and audio-visual media. Col. 4:6-28. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the arrangement for performing the method of claims 3 and 4 to be a disc player for audio and audio-visual media. One would be motivated to do so to manage the reproduction of audio-visual data as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 19, 23 and 24.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jk

May 10, 2007

Benjamh E. Canter